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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/034,446
Filing Date: December 26, 2001
Appellant(s): SOUTHERN ET AL.

Bradley Gould
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 7/18/08 appealing from the Office action mailed 10/18/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5951796	MURRAY	09-1999
5570554	SEARER	11-1996
2088238	GREENWAY	7-1937

ARMSTRONG 4/29/2001 PAGES 1-13

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 10, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (2088238) in view of Armstrong (NPL), Murray, and Searer (5570554).

Greenway (figure 1) shows a method of attaching solid hardwood floor planks (page 2, col 2 lines 24-30) to a concrete floor surface comprising the step of preparing solid wood floorboards having at least about 3 feet (page 1 col 1 lines 26-29) for attachment to the concrete surface (12) and securing the floorboards to the concrete with an adhesive (8), the step of allowing the adhesive to set, the step of providing the floorboards with surface wormholes (6, it is unclear from the claims what applicant's wormholes look like and the structure at 6 reasonably interpreted as meeting the limitation of wormhole) or colors (inherently so), the step of applying adhesive to the concrete floor surface, preparing the concrete floor surface to be substantially flat, the floorboards being prepared away from the installation site (old and well known to make hardwood flooring at a manufacturing plant), the floorboard being provided with color (inherently so) and wormholes (6), nails (14) can be used in the wormholes (6) to fasten the board to the concrete at "substantially" right angle thereto through the board, the floorboards being prepared with surface features(6 and 2, and the protrusion 1 above the wormhole 6) that

include at least one of wormholes (6) and scratches, and the floorboards are nailed by nailing nails into the surface features to hide the nails therein, the floorboards are installed so that the surface features (visible when the edge panels are not yet installed, and the step does not require that the installation is complete) are visible, the adhesive is applied to provide an adhesive layer.

Greenway does not show the step of applying the floorboards to the concrete floor surface with at least one water resistant, water impermeable adhesive, and the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards after the step of applying.

Armstrong (step 3: Installation of flooring, paragraphs 1 and 5) discloses the step of gluing floorboard to a concrete slab and then nailing the floorboard to the substrate (paragraph 5) to help hold the row in place.

Searer shows a hardwood floor plank boards being nailed to the concrete floor surface substantially at right angles thereto through the boards.

Murray discloses an adhesive for mounting tiles to concrete floor (col 8 example 1), the adhesive being water resistant, water impermeable adhesive (col 7 lines 61-63), the adhesive able to fill voids or imperfections between construction material and having a rapid cure time (col 3 lines 45-49), the adhesive comprising moisture curable polyurethane-based composition, the adhesive comprising a prepolymer including a polyol and an isocyanate.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's method steps to show the step of applying adhesive and nails to secure the floorboard to the substrate as taught by Armstrong, the step of providing an adhesive that is water resistant, water impermeable as taught by Murray, the step of nailing the boards to

the concrete floor surface substantially at right angles thereto through the boards as taught by Searer because applying nails to a floorboard bonded to the concrete floor by an adhesive, would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong, having the adhesive connecting the floorboard to the concrete being water resistant, water impermeable would enable the secure fastening of a flooring structure to a concrete substrate, filling voids or imperfections between construction material, providing fast curing time as taught by Murray, and having nails going substantially at right angles thereto through the boards would further enhance the securing of the floorboards to the concrete as taught by Searer.

Greenway as modified shows all the claimed method steps.

Per claims 14-15, Greenway as modified further shows the adhesive comprising a prepolymer including a polyol and a diisocyanate as taught by Murray.

Per claim 17, Greenway as modified shows the claimed method step of nailing nails into the surface features to hide the nails therein.

Per claim 18, Greenway as modified shows the claimed method of nailing the floorboards to the concrete through the adhesive layer.

Per claim 19, Greenway as modified shows the adhesive being allowed to set after the floorboards are nailed.

Per claim 20, Greenway as modified shows all the claimed method steps including the steps of nailing the boards to the concrete floor surface to hold the boards to the adhesive on the concrete surface as the adhesive sets.

Per claims 3, 10, Greenway as modified shows all the claimed method steps except for the step of preparing the concrete floor surface to be clean, dry, smooth, and low in surface moisture.

Armstrong further discloses the steps of preparing a subfloor surface for gluing, the subfloor surface needs to be clean, dry, smooth, low in surface moisture, and substantially flat before the application of adhesive (see section for "SUBFLOOR REQUIREMENTS").

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's modified method steps to show the step of preparing the concrete floor surface to be clean, dry, smooth, low in surface moisture because it would enable the proper application of adhesive between the floorboards and the subfloor surface as taught by Armstrong.

3. Claims 1-2, 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (2088238) in view of Armstrong (NPL), and Murray.

Greenway (figure 1) shows a method of attaching solid hardwood floor planks (page 2, col 2 lines 24-30) to a concrete surface comprising the step of preparing solid wood floorboards having at least about 3 feet (page 1 col 1 lines 26-29) for attachment to the concrete surface (12) and securing the floorboards to the concrete with an adhesive (8), the step of allowing the adhesive to set, the step of providing the floorboards with surface wormholes (6) and colors, the step of applying adhesive to the concrete floor surface, preparing the concrete floor surface to be substantially flat, the floorboards being prepared away from the installation site (old and well known to make hardwood flooring at a manufacturing plant), the floorboard being provided with color (inherently so) and wormholes (6), nails (14) can be used in the wormholes (6) to fasten the

board to the concrete at "substantially" right angle thereto through the board, the floorboards being prepared with surface features that include at least one of wormholes (6) and scratches, the floorboards are nailed by nailing nails into the surface features to hide the nails therein, the floorboards are installed so that the surface features (visible when the edge panels are not yet installed, and the step does not require that the installation is complete) are visible, the adhesive is applied to provide an adhesive layer.

Greenway (figure 1) does not show the step of applying the floorboards to the concrete floor surface with at least one water resistant, water impermeable adhesive, and the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards after the step of applying.

Armstrong (step 3: Installation of flooring, paragraphs 1 and 5) discloses the step of gluing floorboard to a concrete slab and then nailing the floorboard to the substrate (paragraph 5) to help hold the row in place.

Murray discloses an adhesive for mounting tiles to concrete floor (col 8 example 1), the adhesive being water resistant, water impermeable adhesive (col 7 lines 61-63), the adhesive able to fill voids or imperfections between construction material and having a rapid cure time (col 3 lines 45-49), the adhesive comprising moisture curable polyurethane-based composition, the adhesive comprising a prepolymer including a polyol and an isocyanate.

Greenway (figure 2) shows nailing the boards to the concrete floor surface substantially at right angles thereto through the boards.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's method steps to show the step of applying adhesive and nails to

secure the floorboard to the substrate as taught by Armstrong, the step of providing an adhesive that is water resistant, water impermeable as taught by Murray, the step of nailing the boards to the concrete floor surface substantially at right angles thereto through the boards as taught by Greenway (figure 2) because applying nails to a floorboard bonded to the concrete floor by an adhesive, would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong, having the adhesive connecting the floorboard to the concrete being water resistant, water impermeable would enable the secure fastening of a flooring structure to a concrete substrate, filling voids or imperfections between construction material, providing fast curing time as taught by Murray, and having nails going substantially at right angles thereto through the boards would enhance the securing of the floorboards to the concrete as taught by Greenway (figure 2).

Greenway as modified shows all the claimed method steps.

Per claims 14-15, Greenway as modified further shows the adhesive comprising a prepolymer including a polyol and a diisocyanate as taught by Murray.

Per claim 17, Greenway as modified shows the claimed method step of nailing nails into the surface features to hide the nails therein.

Per claim 18, Greenway as modified shows the claimed method of nailing the floorboards to the concrete through the adhesive layer.

Per claim 19, Greenway as modified shows the adhesive being allowed to set after the floorboards are nailed.

Per claim 20, Greenway as modified shows all the claimed method steps including the steps of nailing the boards to the concrete floor surface to hold the boards to the adhesive on the concrete surface as the adhesive sets.

Per claims 3, 10, Greenway as modified shows all the claimed method steps except for the step of preparing the concrete floor surface to be clean, dry, smooth, and low in surface moisture.

Armstrong further discloses the steps of preparing a subfloor surface for gluing, the subfloor surface needs to be clean, dry, smooth, low in surface moisture, and substantially flat before the application of adhesive (see section for "SUBFLOOR REQUIREMENTS").

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's modified method steps to show the step of preparing the concrete floor surface to be clean, dry, smooth, low in surface moisture because it would enable the proper application of adhesive between the floorboards and the subfloor surface as taught by Armstrong.

4. Claims 5-7, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenway (2088238) in view of Armstrong, Murray, and Searer (5570554).

Greenway shows hardwood floor planks (page 2, col 2 lines 24-30, figure 1) of at least about 3 feet (page 1 col 1 lines 26-29) being attached onto a concrete surface and securing it with an adhesive, the floor having varying thickness at the grooves, the floorboard being provided with color and wormholes (6), nails (14) can be used in the wormholes (6), the floorboards are of varying thickness (at the grooves).

Greenway does not show the adhesive being water resistant, water impermeable adhesive, nails that extend at right angles to the concrete floor surface through the boards, through the adhesive and into the concrete floor surface.

Armstrong (step 3: Installation of flooring, paragraphs 1 and 5) discloses gluing floorboard to a concrete slab and then nailing the floorboard to the substrate (paragraph 5) to help hold the floorboard in place, the nails going through the board and the adhesive into the concrete floor surface.

Searer shows a hardwood floor plank boards being nailed to the concrete floor surface at right angles thereto through the boards.

Murray discloses a water resistant, water impermeable adhesive (10) securing a flooring surface to a concrete surface.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Greenway's structure to show nails going through floorboards and adhesive and into the concrete floor as taught by Armstrong, the adhesive being water resistant, water impermeable as taught by Murray, nails attaching the boards to the concrete floor surface substantially at right angles thereto through the boards as taught by Searer because having nails attaching a floorboard bonded to the concrete floor by an adhesive, would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong, having the adhesive connecting the floorboard to the concrete being water resistant, water impermeable would enable the secure fastening of a flooring structure to a concrete substrate, filling voids or imperfections between construction material, providing fast curing time as taught by Murray, and

having nails going at right angles thereto through the boards would further enhance the securing of the floorboards to the concrete as taught by Searer.

(10) Response to Argument

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to combine is found in the references themselves. Greenway's teaching is enhanced and improved by the combination of the references as set forth above in the rejection. The arugment is thus moot.

With respect to applicant's argument to Greenway, examiner respectfully sets forth that Greenway teaches the attachment of floor planks to a concrete surface with an adhesive. the reference also shows wormhole as claimed. The combination of Greenway with Searer and Armstrong and Murray resulting in the reference Greenway showing the adhesive being water-resistant, water impermeable adhesive and the nails going through the board and through the concrete as claimed. As set forth by Armstrong, nails are used to hold the planks in place while adhesive is dried. Searer teaches the use of nails for nailing floor board to a concrete surface. A person having ordinary skill in the art would have found it obvious to modify Greenway's teaching with Armstrong's and Searer's teaching to arrive at the method step of first applying adhesive to the undersurface of the plank and then nailing through the planks into the concrete.

Performing such a method step would arrive at the expected result of having the planks at precisely the desired position when the adhesive dries since the nails hold the planks in place. As applicant is well aware, until the adhesive dries, the plank is loose and is subjected to movement. Nailing the planks in place would prevent the planks from movement before the adhesive dries. Furthermore, having nails nailing the planks to the concrete floor in addition to the adhesive would enhance the fastening of the plank to the floor, resulting in an enhanced secured floor structure.

With respect to "the nailing the boards to said concrete floor surface substantially at right angles thereof", examiner respectfully sets forth that the reference shows nails at substantially at right angles thereof. Furthermore, Searer teaches nails going through planks at substantially right angles, a combination of the references show the claimed limitations.

With respect to "wormholes", the reference shows the limitations as claimed. If applicant means "wormholes" to represent a specific structures different from the groove, applicant is respectfully asked to the put the limitation in the claim.

With respect to the Supplemental Declaration to Richard Hirsch, it is found not persuasive as the rejection of the claims based upon Greenway, Armstrong, Murray and/or Searer teaches applicant's claimed limitations. To further respond to applicant's Declarations, examiner would like to point out that the combination enhances the attachment of Greenway's boards to its substructure. The modification is thus encouraged and motivated. Other arguments in the Declaration are also not persuasive as explained above.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to Armstrong, the reference is relied upon to modify the primary reference to Greenway. Greenway as modified by Armstrong, further shows the structure being bonded by an adhesive, and thus would enhance the ability of the floorboard to stay in place while the adhesive is dried as taught by Armstrong. The combination shows the limitations as claimed.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

With respect to the Declaration to James Perkins, the Declaration has been considered and found to be non-persuasive. Examiner has found it obvious to combine the references to arrive at an improved teaching for Greenway. The combined teaching also shows all the claimed limitations.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Phi D A/

Primary Examiner, Art Unit 3633

Conferees:

Brian Glessner /BG/

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